WIRELESS THERMOSTAT

The Herschel iQ T1 Thermostat is a modern control specifically designed to regulate Herschel Infrared Heaters when paired with the iQ R1 wireless receiver. When used in conjunction with the iQ HUB, it can also be controlled remotely via the internet using an app.

T1 features 3 manual modes and 7 x 1 day programming. T1 will operate your Herschel heater(s) by turning them ON if the room temperature is lower than the desired temperature and will turn them OFF once the desired temperature is reached or exceeded.

The T1 is designed to be easy to operate and incorporates the latest energy-saving features including Herschel's open window technology and an adaptive start function ensuring your room is always at the right temperature with the least energy use.

The T1 can be paired to more than one R1 wireless receiver, meaning multiple heaters within the room can be controlled by the T1 Thermostat. Multiple heaters can also be wired to a single R1 receiver so long as 10 amps is never exceeded per R1.

Please read these instructions in conjunction with the R1 Wireless Receiver instructions. Both devices T1 and R1 must be "paired" to each other for the T1 to operate. NOTE: The T1 cannot control Herschel infrared panel heaters without the R1 Wireless Receiver.
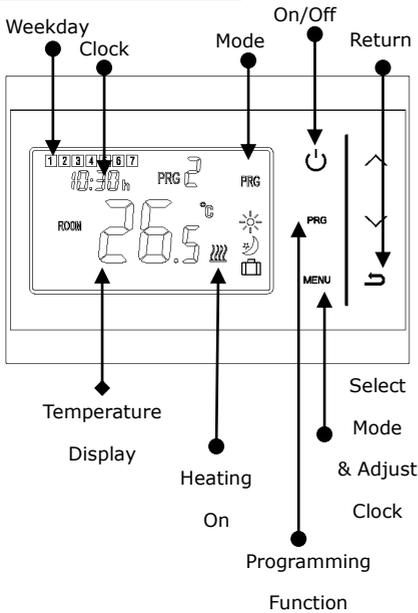
Key features

• Battery operated

• Easy to use and install on a wall, or freestanding

• 7 x 1 day programmable

• 3 modes including holiday mode

• Open window function

• Adaptive start

• Wireless 433Mhz

• CE, Rohs, RED approved

• Wireless distance: 200m (in open places)
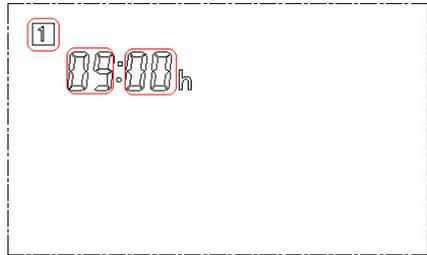
• 12 month warranty

The T1 can be wall mounted using the mounting plate and fittings included or can be free standing using the stand included. If possible, choose a location where the unit cannot be interfered with by unauthorised people and far enough away from the Herschel infrared heaters to allow it to sense an average room temperature.

Displays & Buttons

Weekday
Clock
Mode
On/Off
Return

Temperature Display

Heating On

Programming Function

Select Mode & Adjust Clock

Operating Instructions

1. Insert the batteries

2. To pair with the R1:

   • Turn off the T1 controller

   • Long press "boost" button on the R1 until LED1 is flickering

   • Long press MENU button on T1 until a code shows on the screen. Then press MENU button again.

3. To pair with internet hub (if purchased):

   • Place hub into "waiting for pairing" (see hub instructions)

• Turn Off the T1 controller

• Long press MENU button on T1 until a code shows on the screen. Then press the MENU button again.

• The code on T1 will flash until pairing with the hub is complete. The LED 2 on the Hub will also stop flashing.

Time and Day setting

1. Turn T1 on.

2. Press the MENU button for 3 seconds until the minutes display flashes. Press the Up or Down arrow buttons on the display to change the value (each press = 1 minute).

3. Press the MENU button again to change the hour display. Press the Up or Down arrow buttons to change the value (each press = 1 hour). This is a 24 hour clock.

4. Press the MENU button again to change the day. Press the Up or Down arrow buttons to select

1 – 7 for Monday – Sunday (so 1 is Monday, 2 is Tuesday etc).

5. Press the Return button once you have selected the right day.

Mode temperature settings

The T1 has 3 temperature modes. Use these modes if the 7 day schedule is not required, or to override the schedule – for example select "Comfort" if you are at home all day, or "Energy Saving" to economise on heat, or "Away" when you are on holiday.

COMFORT

ENERGY SAVING

HOLIDAY

The comfort mode is displayed as a ☀ symbol (e.g. 25.5°C).

The energy-saving mode is displayed as a 🌙 symbol (e. g. 20.5°C).

The holiday mode is displayed as a ☐ symbol (e.g. 10°C).

To set Mode temperature:

*   Press the MENU button, the Comfort Mode temperature symbol ☀ will be displayed. Change the temperature using the Up and Down buttons. "SET" is displayed indicating you have changed the setting.

*   Press MENU again to display the Energy Saving mode temperature 🌙. Change the temperature using the Up and Down buttons. "SET" is displayed indicating you have changed the setting.

*   Press MENU again to display the Holiday (Away) Mode temperature ☐. Change the temperature using the Up and Down buttons. "SET" is displayed indicating you have changed the setting.

*   Return to the main page by pressing the Return button.

To select a mode at any time, press the MENU button. This selection will override the schedule or current temperature setpoint. For example by selecting Holiday mode (using the MENU button) the T1 will maintain your holiday temperature setting until another mode is selected.

Program Mode

The T1 has a 7 x 1 day timer (Monday to Sunday) with 4 periods per day. Set Period 1 as the temperature for the morning. Period 2 is the fallback temperature for the daytime. Period 3 is the temperature required for the evening and period 4 is the overnight temperature.

Unlike conventional heating, Herschel Far infrared directly heats the room (the "Thermal Mass"). For areas in frequent use it is more economical to avoid temperatures dropping too low as the heater will need to be on for a much longer period to restore temperatures. We recommend overnight setback temperatures of no lower than 14°C and daytime temperatures of 16°C and above.

To select Program Mode press MENU until PRG is displayed as the mode. The schedule will then operate until another mode is selected.

To set the 7 days program

The default program you will receive with your T1 is:

	All days
Period 1	0600 20℃
Period 2	0900 16℃
Period 3	16:00 20℃
Period 4	23:00 16℃

To alter this schedule:

- Press the PRG button for 3 seconds to start the 7 x 1 day program setting. The First period of the First day is selected.

- Press the Up or Down button to change the time of the first period of the day's program.

- Press PRG again to move to the temperature setting of the first period and use the Up and Down buttons to adjust the temperature.

- Press PRG again to move to the second period of the first day's program. Repeat the above procedure to finish setting the other periods of the first day's program.

- Press PRG again to move to the first period of the second day.

- Once setup is complete, press Return to get back to the main display.

Temperature can always be overridden manually by pressing the Up and Down buttons. The temperature will remain at this setting until the next programmed change occurs. For example, using the default schedule in the previous table, if it was 18:00 on a Monday the thermostat would be set to 20°C. If you wished to increase the temperature to 21°C, press the Up button to increase temperature to 21°C. The thermostat would then retain this setting until 23:00 when the period 4 schedule would reduce the set temperature to 16°C.

Parameter Settings

The T1 has several special operating parameters you can set, these are:

Temperature Calibration to adjust the unit to compensate temperature up or down by up to 8°C. For example if you have another control in the room which

reads differently from the T1, or if you have to place the T1 close to the radiator and don't want to have the T1 stop the heat before the rest of the room has warmed up (negative adjustment needed). Or perhaps the T1 is placed in a cold area (e.g by a window) and you want the T1 to stay on less so the rest of the room does not overheat (positive adjustment needed).

Open Window on / off

Open Window is an energy saving feature. When the room temperature is 14°C and above, if the thermostat senses a fall in temperature of 2°C or more within a 15 minute period, the T1 will turn off the heater(s) for one hour and "OP" will show in the display. This is to avoid wasting electricity where a window or door is likely to have been opened. Whilst you can always override this by adjusting the temperature Up or Down or pressing the BOOST button on the R1, you can also switch off the function totally (see how to change the Parameter Settings below).

Adaptive Start

Adaptive Start is another energy saving feature designed to smooth-out heating consumption when large jumps in temperature exist between the current set temperature and the next scheduled temperature (implies large energy use). Herschel's adaptive start function will compare the currently sensed temperature against the next scheduled setpoint and if the difference is more than 5°C it will start the heater earlier. You can use Parameter Settings to turn off Adaptive start totally.

How change Parameter Settings:

- Turn off the T1.
- Press MENU and UP button together for 3 seconds. This brings up each available parameter in turn as shown in the table below. The parameter is changed by pressing the Up or Down button and the next parameter selected by pressing MENU.

| Menu	Description	Range	Default
01	Temp. calibration	-8 ℃ / +8 ℃	0℃
02	Open Window	0:Off 1:On	1
03	Adaptive start	0:Off 1:On	On
04	Software info.	-	-
05	Software info.	-	-

Failsafe Mode

If the T1 is paired to the hub and fails to receive any commands for more than 30 minutes, the T1 will operate on its current settings until a new command is received.

If the T1 loses signal with the R1 for more than 30 minutes, the R1 will default to 18°C.

This feature ensures that heaters can still operate sensibly and safely in case of failure or signal issues with the hub or T1.

Dimensions (mm):
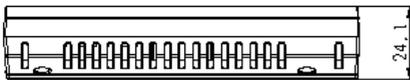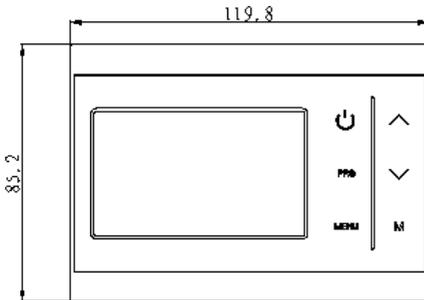
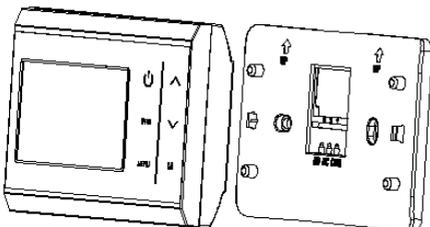Length: 119.8 x Height: 85.2 x Depth: 24.1

Technical Information:

Frequency	433 MHz
Power Supply	2*AAA battery
Set Point Range	5~30℃
Ambient	0~50℃
Relative Humidity	85%
Backlight	White
Sensor	NTC 10K, 3950ohms at 25℃
Accuracy	± 0.5℃ (step control by +0.5℃)
Protection Class	IP20
Housing	ABS to UL94-5 fire retardant plastic

Mounting Options:

Stand-alone:

Wall-mounted:

Certifications:

EN60950 Information Equipment Safety

EMC ETSI EN301 489

Radio ETSI EN300220

EMC EN61000-6-3: 2007 + A1: 2011 EMC

EN61000-3-2:2014

EMC EN61000-3-3: 2013

EMC EN61000-6-1:2007

ISO 9001: 2008 Compliant Manufacture

EN60730-2-9:2010 with EN60730-1:2011

(Safety of Automatic Electrical Controls)

RoHS 2011/65/EC

REACH 1907/2006/EC